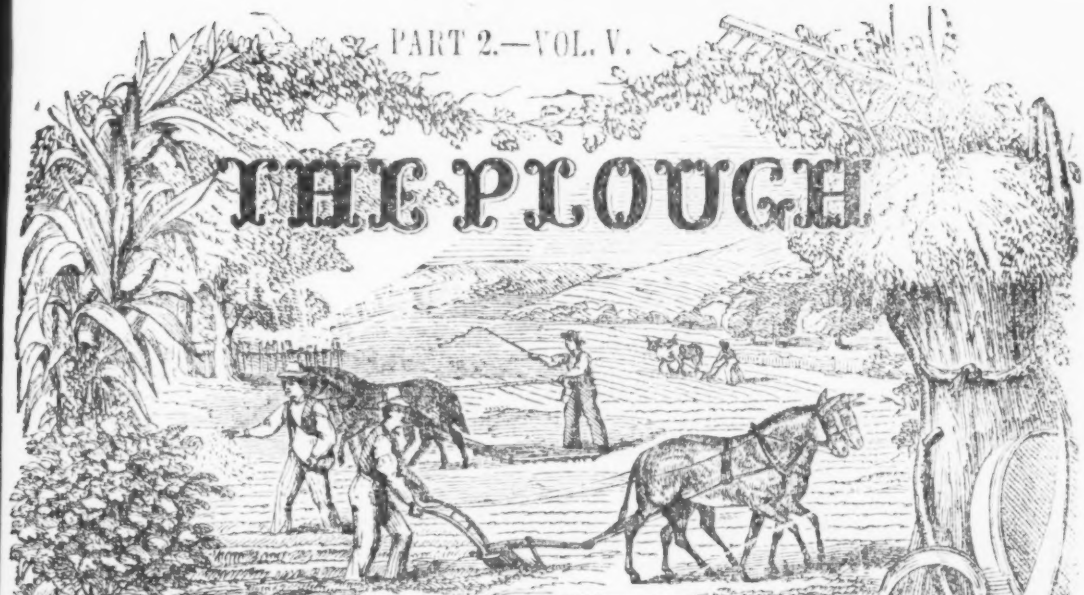
PART 2.—VOL. V.

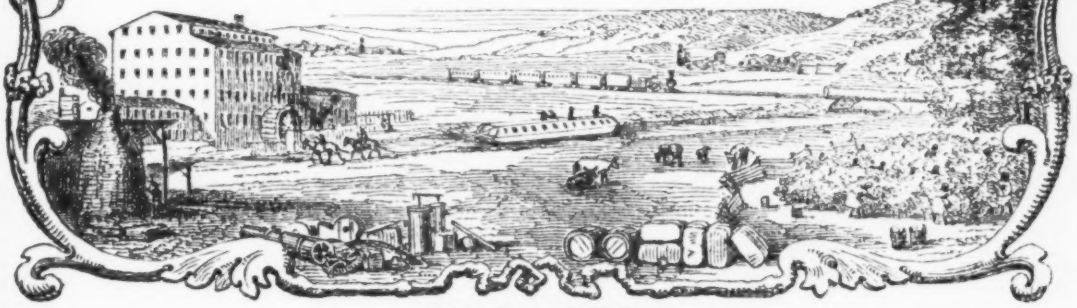
THE PLOUGH,



THE LOOM AND THE ANVIL.

FARMER AND MECHANIC.

DEVOTED TO SCIENTIFIC AND PRACTICAL AGRICULTURE—MANUFACTURES—MECHANICS—NEW INVENTIONS—A SOUND PROTECTIVE POLICY—FARM BUILDINGS—COTTAGE DESIGNS—FRUIT TREES—FLOWERS—GARDENING—BEES, CATTLE, HORSES, HOGS, SHEEP, POULTRY, &c.



NEW-YORK:
PUBLISHED BY MYRON FINCH, 9 SPRUCE STREET,
FOR THE PROPRIETORS.
1853.

JOHN A. GRAY,
PRINTER,
97 Cliff, cor. Frankfort Street, New-York.

INDEX TO PART II., VOL. V.

Accidents, Results of, 255.
Agricultural Implements in England, 317.
Air-Heating Pipes, 62.
" Tight Ovens, 185.
American Institute, 119.
" Planing Machine, 123
" Chronometers, 256.
" Polytechnic Journal, 255.
Animals, Social Life among, 188.
Application of Chemistry for Families, 115.
Arts, Utility of, 125.
Atmosphere, Uses of the, 121.
Ayrshire Cow, 253.
Beebe & Co., 254.
Birds, Don't kill the Small, 63.
Bread Unfermented, 117.
" to make Brown, 116.
" Cutter, 120.
Bridgewater Paint, 255.
Calculating Machine, 59.
Calendar Clock, 64.
Caloric Ship Ericsson, 64, 123, 126.
Car-wheels, Improved, 120.
Cattle, Plan to Improve, 253.
" How to Judge, 63.
Circular Saw, 123.
Clover-Thresher, 127.
Cotton-Scraper and Cultivator, 118.
Cravats, 191.
Crystal Palace, 257.
Electrcal Discovery, 62.
Electro-Magnetic Battery, 63.
Enamel for Cards, 252.
Ericsson Water and Coal Regions, 123.
Espiritu Santo, The Flower, 118.
Evergreens, Soil for, 318.
Exhibition at Washington, 64.
Exports from New-York, 1852, 254.
Feed for Animals, 189.
Fire Engine, Invention of, 124.
First Use of Mahogany in England, 317.
First Saw-mill, The, 256.
Flax, 189.
Fenders, Railway, 122.
Glass, Manufacture of, 121.
" and China, Ornamenting, 121.
Glue, Liquid, 252.
Gold in Vermont, 120.
Good Crop, 318.
Grapes, Preservation of,
" Special Manure for, 317.
Hair Restorative, 64.
Impressions of Seals, &c., How to take, 252.
Iron and Steel, Improvement in the Manufacture of, 184, 251.
Joiner's New Machine, 123.
Lamp, A Peculiar, 124.
Lenses, Manufacture of, 18.
Liebig Medal, 123.
Life Preservers, 124.
Lightning Rods and Iron Ladders, 251.
Lime in Agriculture, Use of, 187.
Loom, Improvements in the, 64.
Lover's Syphon, 184.
Machine for Cramping Iron Bars, 184.
" New Printing, 186.
" " Reaping, 187.
" McCormick's Reaping, 189.
" Plastering, 59.
" for Winding Yarns and Threads, 187.
Manufacture of Paper, 184.
" Writing-Quills, 61.
Meade & Brothers, 255.
Mechanism, The Reality and Poetry of, 125.
Mineral Matter, Assimilation of, 127.
Music in New-York, 190.
Pine, New Use for the Leaves of the, 252.
Railroads, Benefit of, 60.
" in Vermont, 254.
Roofing, New Method of, 58.
Rotary Engine, 61.
Rhubarb, or Pieplant, 187.
Safety Steam-Boiler, 62.
Separating certain Metals, 186.
Sewing-Machines, 186.
Shanghai Sheep, 253.
Shoes by Machinery, 63.
Stained Woods, 253.
Statistics of Michigan, 61.
Steamboats and their Tonnage, 255.
Steamboat Wheel, New, 124.
Straw-Cutter, 127.
Telegraphs in America, 58.
" between Europe and America, 185.
Tinning, New Process of, 62.
To Thaw out a Pump, 64.
Threshing-Machines, 118.
Useful Inventions, 64.
Umbrella, New, 186.
Absorptive Power of the Soil, 211.
Agriculture in Canada, 51.
" Use of Lime in, 18.
Agricultural Prospects of Georgia, 152.
" Societies, 283.
American Exhibition of 1853, 1.
" Iron, 83, 290.
" Laborer, Interests of the, 52.
" Manufactures, 275.
Analysis of the Cotton Plant and Seed, 84.
" Clam and Oyster Shells, 156.
Apple-Peeler, The Patent Premium, 217.
Apples, Keeping, 34.
Arabian Horse, Tartar, 15.
Artificial Horn, or Tanned Gelatine, 166.
" Manures, 97.
Atmospheric Railway, 7.
Aurora Borealis and the Telegraph, 262.
Bees, Feeding of, and Phelps' Hives, 308.
Beets, Culture of, 149.
Binocular Microscope,
Bread, Good, 167.
" How to Toast, 272.
" New and Old, 167.
Census Returns, 1850, 44.
Central Ohio, Dairy Business in, 240.
Charcoal, Properties, 51.
Cheese, Milk, and Butter, 112.
Chemist, State, 47.
Chemistry, Magic of, 277.
Chucking and Turning, Lathe for, 93.
Cinnamon Fields of Ceylon, 227.
Cisterns, 81, 206
Climate and Temperature, 265.
Clock, Mechanism of a, 158.
Coal-Dust for Manure, 54.
Coating Zinc, 82.
Cochineal Insect, 91.
Compost Heap, Formation of the, 215.
Corn, Stowell's Evergreen Sweet, 108.
Cotton and its Manufacture in Great Britain, 196.
" Lime on, 171.
" Mode of Planting and Cultivating, 223, 302, 307.
Cows and Oxen in Portugal, 222.

Crops in N. Wisconsin, 46.
Culture of the Rose, 140.
Culture of the Beet, 149.
Cultivator-Plough, Richardson's, 297.
Curious, A Question for the, 34.
Disease, The Potato, 28.
Discoveries, Useful, 166.
Discovery in Sugar-Making, 271.
Draining, Cheap, 90.
" When Useful, 280.
" Effects of, &c., 233.
Drawing, Perspective, 8, 198, 268.
Drill, The Suffolk, 289.
Duplicate Turning of Profile Work, 227.
Economy in Horse-Flesh, 178.
Edge Plane, The, 313.
Electricity and Electric Machines, 65.
Electro-Telegraphic Development, 181.
English Farm Instruments, 170.
Essex County, Mass., Agricultural Society, 286.
Familiar Letters on Scientific and Practical Farming, 94, 163.
Fancy Poultry, 46.
Farming, Profits of, 175.
Fattening Hogs, 33.
Flax-Culture in Indiana, 280.
Flower, an Elegant, 50.
" Garden, 293.
Flying Railroad Bridge, 230.
Foot-Rot in Cattle, 230.
Fruit Trees, Bearing Years of, 45.
" Dwarfing, 237.
Glass, Bending and Annealing, 92.
Gold-Separator, Buffum's Perfected, 100.
Grape-Culture, 273.
" Varieties of the, 176.
Growth, Chemistry of Vegetable, 173.
Guano, or a Substitute, 41.
Horse, Lectures on the, 214, 281.
" Tartar, American, 15.
Horticultural, 297.
Hot-bed, How to make a, 16', 203.
Husbandry, Familiar Letters on, 94.
Hydraulic Ram, 13.
Illustrations of Popular Machinery, 147.
Information Wanted, and Editors' Reply, 225.
Inventions, &c., 208, 241.
Iron, American, 83, 290.
" its Nature, History, and Present State, 136.
" Railroad, 248.
Japan Pea, 306.
Lamp, Another Safety, 172.
Laplanders, The, 276.
Lathes, 96.
Lead Pipe, Manufacture of, 213.
Leaves and Flowers, Plaster Casts of, 166.
Letter to the Hon. R. M. F. Hunter, 69, 129.
Letters on Practical and Scientific Husbandry, 94, 163.
Letters to Farmers and Mechanics, 104.
Loom, and its Probable Origin, The, 67.
Machines, Formulæ for the Construction of Parts of, 247.
Machines for Picking Stones, 233.
" Tools, Needles, 155.
" Otis's Mortising, Boring, and Hub-boring, 305.
Manufacture of Wrought Iron, 181.
Manufactures, American, 275.
" and Inventions, 208.
Manure, Poultry, 292.
" Woollen Rags as a, 45.
Mechanical Powers, 106.
Mechanics of Farm-Work, 17, 29.
" Wheels, 204.
Mechanism of a Clock, 38.
Milk-producing Food, 243.
Minerals of Lamoille County, Vt., 224.
Mirrors on Locomotives, 233.
Motion, Reciprocating and Rotary, 311.
Mules for Market, Rearing of, 86.
Mush, 247.
National Interests, 257.
Night-Soil, Value of, 279.
Observations on Rearing Poultry, 110.
Onondaga County, Salt-Works, &c., 207.
Oyster-Shells, &c., 156.
Patent Office, 49.
Peach Trees, 37.
Penguin, 238.
Phosphorescence of the Sea and of Animals, Causes of the, 314.
Plymouth County, Mass., Agricultural Society, 286.
Pork-Trade of the West, 220.
Poultry, Great Prices for Fancy, 46.
Propeller, Wilson's New, 40.
Pruning, Theory of, 42.
Rags as a Manure, 45.
Railway, Atmospheric, 7.
Ram, Hydraulic, 13, 206.
Reciprocating or Rotary Motion, 311.
Rice, Upland and Lowland, 167.
Rose, Culture of the, 140.
Safety Lamp, Another, 172.
Season, The, 46.
Seeding for Grass and Hay, 298.
Science, True and False, 11.
Self-Protection, 299.
Sheep, How to Keep, 36.
Short-Horn Bull Buckwoodsman, 243.
Shoulder-Slip in Horses, 48.
State Chemist, 47.
Straw as a Covering, 221.
" Value of, 112.
Suffolk Drill, The, 28.
Sugar-Making, Useful Discovery in, 271.
Sumac, 239.
Tanned Gelatine, or Artificial Horn, 166.
Tartar, the American Horse, 15.
Temperature and Climate, 193, 265.
Threshing in Greece, 219.
Turkeys, Rearing, 177.
Under-Draining, 239.
Useful Discoveries, 166.
Vegetable Growth, Chemistry of, 173.
Wilson's New Propeller,
Woollen Rags as a Manure, 45.

NEW BOOKS.

American Florist's Guide, 315.
Annual of Scientific Discovery, 1853, 250.
Arts of Tanning and Currying, The, 189.
Aunt Effie's Rhymes, 57.
Bijou Musicale, 57.
Captive in Patagonia, The, 250.
Child's History of England, The, (Dickens,) 316.
Class-Book of Chemistry, 57.
Cold Grapery, The, (Chorlton,) 316.
Description of 100 Cities and Large Towns, 250.
Doll and her Friends, The, 57.
Eclectic German Reader, 113.
Engineer's Pocket Companion, 57.
Flower Queen, The, 315.
Footsteps of our Forefathers, 56.
Fun and Earnest, 112.
Gazetteer of the U. S. of America, 183.
Harper's New Monthly Magazine, 316.
Home Cookery, 56.
Illustrated Magazine of Art, 183.
Introductory Lessons in Geography, 183.
Japan, 113.
Ladies' Keepsake and Home Library, 112.
Louis XVII. of France, the Bourbon Prince, 316.
Mechanical Drawing-Book, (Minifie,) 251.
" Philosophy, (Cowes,) 56.
Memory of Washington, The, 56.
Metropolitan Glee Book, 56.
Miseries of Human Life, The, 315.
Mother and her Offspring, The, 312.
Philosophy of Mysterious Agents, (Perkins,) 249.
Phonographic Teacher, The, 249.
Practical Treatise on the Culture of the Grape-Vine, (Chorlton,) 315.
Progressive Farmer, The, 249.
Putnam's Monthly, 250, 315.
Repository of Instructive and Amusing Papers, (Chambers,) 250.
Rural Chemistry, 56.
Schoolfellow, The, 114.
Selection of English Synonyms, 56.
Society of Friends, The, 250.
Shorter Course with the German Language, 114,
Stephens' Book of the Farm, 114.